6. 510(k) Summary

Manufacturer:

GS Medical Co. Ltd.

12F Kolon Digital Tower Aston,

505-14 Gasan-Dong

Geumcheon-gu, Seoul, Korea

Date:

October 14, 2011

Submitted by:

GS Medical Co. Ltd

Company Contact

Dong Young Kim +82-2-2082-777

+82-2-2082-7778 (FAX)

US Agent Information

Orgenix LLC

Mr. Donald W. Guthner

111 Hill Road

Douglassville, PA 19518

+1-646-460-2984

+1-484-363-5879 (FAX)

Classification Name:

Intervertebral Body Fusion Device

Common/Usual Name:

Intervertebral Body Fusion Device, IBF Device

Proprietary Name:

AnyPlus PEEK ALIF Lumbar Fusion Cage AnyPlus PEEK DLIF Lumbar Fusion Cage

Performance standards:

The GS Medical AnyPlus PEEK Lumbar Cage was non-clinically tested according to the ASTM 2077-03 and ASTM F2267-04

performance standards.

Classification no.:

21 CFR 888.3080

MAX - Intervertebral body fusion device

Class II

Substantial Equivalence:

Substantial equivalence for the GS Medical AnyPlus PEEK Lumbar Cage is based on its similarities in indications for use, design features, operational principles and material composition when compared to the predicate devices cleared under the following pubmissions.

following submissions:

K100516 AnyPlus PEEK Lumbar Cage

K111354

Predicate Devices:

The subject device is substantially equivalent to similar previously cleared devices.

Device Description:

The GS Medical AnyPlus PEEK Lumbar Cage device consists of implants available in various heights and lordotic configurations with an open architecture to accept packing of bone graft material. The implants are made of polyether-ether-ketone (PEEK OPTIMA LT1) (Manufacturer – INVIBIO) body with the x-ray markers made of Titanium alloy (Ti-6Al-4V). This submission includes the addition of sizes to the model ALIF devices and a revision of the shapes of the TLIF model and the PLIF model to accommodate surgeons using a Direct Lateral Interbody Fusion (DLIF) surgical approach.

Intended Use:

The AnyPlus PEEK Lumbar Cage is indicated for use with autogenous bone graft in skeletally mature patients with degenerative disc disease ("DDD") at one or two contiguous spinal levels from L2-S1. DDD is defined as discogenic back pain with degeneration of the disc confirmed by history and radiographic studies. These patients should have had six months of non-operative treatment. These DDD patients may have up to Grade 1 spondylolisthesis or retrolisthesis at the involved level(s).

Summary of Technological Characteristics

The GS Medical AnyPlus PEEK Lumbar Cage devices are designed for restoring the height of the intervertebral space after resection of the disc. The AnyPlus PEEK Lumbar Cage devices consist of implants available in various heights and lordotic configurations with an open architecture to accept packing of bone graft material. The implants are made of polyether-ether-ketone (PEEK) body with the x-ray markers made of Titanium alloy (Ti-6Al-4V). The intended use, technological characteristics, mode of action and materials of construction are the same as those of the referenced predicate devices

Non-Clinical Testing

The GS Medical AnyPlus PEEK Lumbar Cage devices were tested according to the ASTM 2077, specifically, Static and Dynamic Axial Compression, Static and Dynamic Compression-Shear Testing, Static and Dynamic Torsion Testing Expulsion Testing and Static Subsidence testing under Axial Compression, per ASTM 2267.

Conclusion

The information discussed above demonstrates requested changes to the GS Medical PEEK Lumbar Cage device is effective and performs as well as or better than the predicate devices.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

OCT 1 7 2011

GS Medical Co., Ltd.
% Orgenix LLC
Mr. Donald W. Guthner
111 Hill Road
Douglassville, Pennsylvania 19518

Re: K111354

Trade/Device Name: GS Medical AnyPlus PEEK Lumbar Fusion Cages

Regulation Number: 21 CFR 888.3080.

Regulation Name: Intervertebral body fusion device

Regulatory Class: Class II Product Code: MAX

Dated: September 19, 2011 Received: September 21, 2011

Dear Mr. Guthner:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act

or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

€ Mark N. Melkerson

Director

Division of Surgical, Orthopedic and Restorative Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

5. Indications for Use

510(k) Number (if known): K111354

Device Name: GS Medical AnyPlus PEEK Lumbar Fusion Cages

AnyPlus® PEEK Lumbar Fusion Cage device is intended for use with autogenous bone graft in skeletally mature patients with degenerative disc disease (DDD) at one or two contiguous spinal levels from L2-S1. DDD is defined as discogenic back pain with degeneration of the disc confirmed by history and radiographic studies. These patients should have had six months of non-operative treatment. These DDD patients may have up to Grade 1 spondylolisthesis or retrolisthesis at the involved level(s).

Prescription Use	AND/OR	Over-The-Counter Use	
(Part 21 CFR 801 Subpart D)		(21 CFR 801 Subpart C)	

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

(Division Sign-Off)

Division of Surgical, Orthopedic,

and Restorative Devices

510(k) Number K111354